

ABSTRACT

5 The present invention provides an electroless
plating liquid which allows a plating rate to be controlled,
is not largely influential on semiconductor characteristics,
and poses no problem on the health of workers, and a method
of forming an interconnection according to a electroless
plating process which uses such an electroless plating
liquid. The electroless copper plating liquid contains
10 dihydric copper ions, a complexing agent, an aldehyde acid,
and an organic alkali. The electroless copper plating
liquid is preferably ~~be~~ used in a method having the steps of
forming an auxiliary seed layer for reinforcing a copper
seed layer in an interconnection groove defined in a surface
15 of a semiconductor device, and performing an electrolytic
plating process using the seed layer including the auxiliary
seed layer as a current feeding layer, for thereby filling
copper in the interconnection groove defined in the surface
of the semiconductor device.